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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/551,757	06/30/2006	Johan Georg Pettersson	PETT3004/JEK	4404
23364 7590 88/17/2009 BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314-1176			EXAMINER	
			STIMPERT, PHILIP EARL	
			ART UNIT	PAPER NUMBER
			3746	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Application No. Applicant(s) 10/551,757 PETTERSSON, JOHAN GEORG Office Action Summary Examiner Art Unit Philip Stimpert 3746 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 03 October 2005. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) _____ is/are withdrawn from consideration. 5) Claim(s) _____ is/are allowed. 6) Claim(s) 1-13 is/are rejected. 7) Claim(s) _____ is/are objected to. 8) Claim(s) _____ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 03 October 2005 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s)

1) Notice of References Cited (PTO-892)

Paper No(s)/Mail Date 10/3/05, 5/19/09

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

Interview Summary (PTO-413)
 Paper No(s)/Mail Date.

6) Other:

Notice of Informal Patent Application

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DETAILED ACTION

Claim Objections

 Claim 1 is objected to because of the following informalities: lines 5-6 recite "their respective outlet," in which recitation it appears that "outlet" should be plural.

Claim 2 is objected to because of the following informalities: lines 6-7 recite "to a
more... degree," which is grammatically incorrect. "Greater" should be substituted for
"more" in that recitation. Appropriate correction is required.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- Regarding claim 1, the claim twice recites "a desired level." It is unclear whether these recitations are intended to signify a single level common to both limitations, or separate levels.
- Regarding claim 3, the claim twice recites "a certain length of time." It is unclear
 whether these recitations are intended to recite a single length or separate lengths of
 time. Clarification is required for that purpose.

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7. Further regarding claim 3, the claim twice recites "a certain length of time" before a condition is met. This is an ill-defined parameter, as the control box cannot know the future state of pressure.

- 8. Regarding claim 11, the claim is indefinite in several respects. First, a positive value (increasing the apparent benefit of activating the associated compressor as perceived by the algorithm per claim 4) is added to a compressor for which a low priority is desired. It appears to the examiner that this will actually *raise* the priority of the compressor, in contradiction to the stated goal of the claim. Further, it is unclear whether "the respective compressor" refers to the low priority compressor or another compressor. Finally, the examiner finds no clear meaning of the recitation "all the greater as the priority is low."
- 9. Regarding claim 12, the claim recites "a compressed air installation comprising at least one compressor according to the method of claim 1." However, claim 1 recites that the installation has at least two compressors. This creates a disagreement in scope between claims 1 and 12 which renders claim 12 indefinite. A similar deficiency is created with respect to the recitation of "at least one control unit."

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

⁽b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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 Claims 1-3, 12, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by US patent 4,502,842 to Currier et al. (Currier).

- 12. Regarding claim 1, Currier teaches a compressed air installation having multiple compressors (P) and teaches that the compressors may be loaded and unloaded (col. 3, ln. 15-25) and thus may be considered "loaded/unloaded" type compressors. Currier teaches that the compressors are connected to a single compressed air network (4) via their outlets (which empty into manifold 2), and that each compressor is provided with a control unit (R). Currier further teaches a control box (10) that is connected to a pressure sensor (14), the control box enabling adjustment of the pressure in the compressed air network relative to a settable target pressure (col. 9, ln. 10-13, "desired target pressure") within a pressure range (col. 10, ln. 53-60) which is limited by a minimum and maximum set pressures (upper and lower deadband pressure levels). Finally, Currier teaches adjusting the pressure by controlling the flow (by loading and unloading) the compressors in order to increase or decrease the pressure as appropriate (col. 6, ln. 55-59).
- Regarding claim 2, Currier teaches that the control box controls the installation by giving orders including at least starting a compressor (col. 7, In. 3-14).
- 14. Regarding claim 3, Currier teaches that the control box will increase or decrease the overall flow when the minimum or maximum respectively is crossed. This will be a certain amount of time, in some operational regimes, before the target pressure is crossed and the opposite limit is reached. This appears to satisfy the limitations of this claim.

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15. Regarding claim 12, Currier teaches a control box having connections to control units (R) and a pressure sensor (14), a memory (42) arranged to store an evaluation table with scores (for instance the loading order of col. 15, ln. 25-46) inputted by a user, and an arithmetic unit (18) with an algorithm (see col. 15, ln. 25-46) which enables comparison between the scores to provide a control order (start/stop or load/unload a compressor) as a function of the highest selected score.

 Regarding claim 13, Currier teaches the claimed air installation (see above discussion of claim 1).

Allowable Subject Matter

- Claims 4-11 would be allowable if rewritten to overcome the rejection(s) under 35
 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
- 18. The following is a statement of reasons for the indication of allowable subject matter: the limitation of scoring various control orders based on their influence is not shown in the prior art of record.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip Stimpert whose telephone number is (571)270-1890. The examiner can normally be reached on Mon-Fri 7:30AM-4:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles G Freay/ Primary Examiner, Art Unit 3746

/P. S./ Examiner, Art Unit 3746 14 August 2009